

**Notice of Allowability**

Application No.

09/944,802

Examiner

Hanh Phan

Applicant(s)

MAROM, DAN MARK

Art Unit

2633

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 10/28/2004.
2. ☒ The allowed claim(s) is/are 1-9.
3. ☒ The drawings filed on 31 August 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
**HANH PHAN**  
**PRIMARY EXAMINER**

## DETAILED ACTION

### 1. REASONS FOR ALLOWANCE:

Claims 1-9 are allowable because the instant application is directed to an nonobvious improvement over the invention described in patent No. 6,493,117 to Milton et al. The improvement comprises an optical add/drop multiplexer (OADM) arranged to add  $v$  optical channels to, and remove  $w$  optical channels from, an input wavelength division multiplexed optical communication signal containing  $x$  optical channels, in order to generate an output wavelength division multiplexed optical communication signal containing  $y$  optical channels, said OADM comprising: a programmable demultiplexer having an input port and  $K$  output ports, said programmable demultiplexer arranged to receive said input signal containing said  $x$  optical channels on said input port and distribute one or more of said channels to each of said  $K$  output ports, wherein one of said  $K$  output ports is a through port containing  $z$  optical channels and wherein the remaining  $K-1$  of said output ports are the drop ports of said OADM, and wherein said  $K-1$  output ports cumulatively contain said  $w$  optical channels, a programmable multiplexer having  $M$  input ports and a single output port, said programmable multiplexer arranged to receive said  $z$  optical channels on one of said input ports and said  $v$  optical channels on the remaining  $M-1$  of said input ports, and combine all of said channels on said  $M$  input ports onto said output port, to generate said output wavelength division multiplexed optical communication signal containing said  $y$  optical channels, and means for controlling (a) said demultiplexer to route desired drop and through channels from said input port of said OADM to said  $K$  output ports and (b) said

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multiplexer to route desired add and through channels from said M input ports to said output port of said OADM, wherein M and K are integers equal to or greater than 2 and wherein v, w, x, y and z are integers. This patentable distinction is included in independent claims 1, 8 and 9.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Milton et al (US Patent No. 6,493,117) discloses WDM optical network with passive pass through at each node.

Thompson et al (US Patent No. 6,243,179) banded add drop device.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (571)272-3035.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached on (571)272-3022. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

  
**HANH PHAN**  
**PRIMARY EXAMINER**